



PATENT  
D-95013A1a

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Confirmation No.: 3880

AHMAD (NMI) WALEH ET AL

Serial No.: 10/786,280

Group Art Unit: 1792

Filed: February 24, 2004

Examiner: A. Markoff

For: METHOD OF REMOVING ORGANIC MATERIALS  
FROM SUBSTRATES

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Mail Stop Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

REPLY BRIEF

Sir:

This is in response to the Examiner's Answer, dated February 26, 2009. Inasmuch as the two month period for response expires on Sunday, April 26, 2009, then filing this Reply Brief on Monday, April 27, 2009, is considered to be timely.

## REMARKS

The Examiner cites several references, each purportedly disclosing a step of Appellants' claimed process. However, it appears that the Examiner has lost sight of the fact that virtually all multi-step processes are comprised of steps, each of which is known in the art. What renders patentability is the sequence of steps to produce a desired end result.

Where the sequence of steps or the results obtained thereby is unsuggested by the prior art, a multi-step process is patentable even if the individual steps are taught. *Ex parte Baril et al*, 124 USPQ 509 (POBA 1958); *Ex parte Kane*, 125 USPQ 70 (POBA 1959); *Ex parte Bond*, 135 USPQ 160 (POBA 1961); *Trio Process Corp. v. L. Goldsteins' Son's, Inc.*, 461 F2d 66, 174 USPQ 129 (CA 3 1972).

It is clear that the Examiner has used Appellants' claims as a template to find references, each one of which teaches a claimed process step. Appellants assert that without the claims before the Examiner, he would be unable to construct Appellants' process from the prior art. Thus, the Examiner is engaging in hindsight, which is impermissible; see, e.g., *In re Fritch*, 23 USPQ 2d 1780, 1783–84 (Fed. Cir. 1992)

With regard to the Examiner's assertion that Gupta et al teach UV as a precursor treatment, this is not what Gupta et al teach. Rather, Gupta et al teach using their SO<sub>3</sub> process on UV-hardened photoresists. Appellants' claimed process starts with providing a substrate with organic material thereon. The organic material is listed in paragraph 0034 of the specification; among the listed species of organic materials are "other hardened photoresists", which the person skilled in this art would readily understand to include UV-hardened photoresists.

In the connection of reciting UV radiation as a precursor treatment, it should be remembered that this is but one example of precursor treatments; in an election of species requirement issued by the Examiner, Appellants were required to elect one of several such treatments, with the other precursor treatments held in abeyance pending allowance of a generic claim. This is also true the optional pre-rinse and the post-rinse

treatments, both of which are currently limited in this appeal to a separate, specific treatment, as discussed in the Appeal Brief.

With regard to the Examiner's dismissal of Appellants' allegation that the step of UV treatment is conducted in a precursor treatment chamber, the Examiner asserts that "the claims are not limited for the argued limitation". However, this is not accurate. Claim 6 recites placing the substrate in a chamber, subjecting the substrate to the precursor treatment, and introducing SO<sub>3</sub> into the chamber (or in a separate chamber). Clearly, the UV precursor treatment may be performed in the same chamber as the SO<sub>3</sub> treatment. Such a process, of course, negates the Examiner's statement that the claimed limitation is met by Gupta et al and their SO<sub>3</sub> treatment of UV-hardened photoresists.

With regard to the Examiner's citation of each of the references purportedly teaching one or another aspect of Appellants' claims, Appellants refer back to their Appeal Brief, in which the arguments and discussions made therein obtain here as well. Appellants emphasize, however, that only Gupta et al disclose using SO<sub>3</sub> in their process. Each of the remaining references, while purportedly addressing a claimed step in Appellants' process, fail to disclose or suggest anything that would suggest to one skilled in this art their combination with Gupta et al.

With regard to the Examiner's assertion that the ultrasonic/megasonic pre-rinse step is optional, this is true with regard to claim 1. However, claim 25 positively recites this step.

In conclusion, as discussed above, the Examiner argues that each of the process steps is "notoriously well-known and conventional in the art". However, this is true of just about all process steps in any method/process claim; see, e.g., *KSR v. Teleflex, supra*. What renders patentability is the sequence of steps to produce a desired end result. The Examiner has failed to cite references that, *in combination*, fairly teach the sequence of steps claimed by Appellants.

SUMMARY

For the reasons set forth in this Reply Brief and for the reasons previously presented in the Appeal Brief, Appellants continue to assert that the pending claims are not taught, suggested, or described by the cited art. Thus, Appellants respectfully request that the rejections of record be reversed.

Appellants encourage the Examiner or a member of the Board of Appeals to telephone the Appellants' undersigned representative if it is felt that a telephone conference could expedite prosecution.

Respectfully

AHMAD WALEH ET AL

April 27, 2009



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